DOCUMENT RESUME

ED 464 785 RC 023 507

AUTHOR Olatunji, Anane N.
TITLE High School Completion among Mexican-Origin Youths: Is Work Experience a Factor?
PUB DATE 2001-10-05
NOTE 40p.
PUB TYPE Reports - Research (143)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Anglo Americans; Cultural Influences; Employment Experience; *High School Students; High Schools; *Hispanic American Students; Immigrants; *Mexican Americans; *Potential Dropouts; *Student Employment; White Students

ABSTRACT

The potential positive and negative effects of early work experience on adolescent well-being and educational attainment have been explored from developmental and zero-sum perspectives, respectively. However, both models assume that schooling is the normative experience and primary responsibility of adolescents, an assumption that may not be valid for immigrant Mexican youth. This paper uses data from the National Education Longitudinal Study, 1988-92, to estimate the effects of working during the 10th grade on the likelihood of graduating from high school two years later. The sample included 10,924 individuals, of whom 1,029 were of Mexican origin. Approximately 17 percent of the Mexican-origin youth were born outside the United States. Work intensity in the 10th grade, measured as hours worked per week, had significant negative effects on high school graduation rates for Mexican-origin youth born in the United States and for non-Hispanic whites, but had a positive effect on the graduation rate of immigrant Mexican-origin youth. The findings are discussed in terms of the drive and determination of voluntary immigrants and the protective value of their culture. An adolescent's attitude toward work, rather than work itself, may be the pivotal factor determining the effects of employment on high school graduation. (Contains 34 references.) (SV)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 464 785

High School Completion among Mexican-origin Youths:

Is Work Experience A Factor?

Anane N. Olatunji, Ph. D.
Independent Education Consultant
8120 Aberdeen Road
New Orleans, LA 70126

e-mail: Olatunji4@yahoo.com

October 5, 2001

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

A. N Olatunji

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

RC 023507

Abstract

Social scientists have addressed the concern that early work experience might undermine the investment in education for teenagers. This study examines this intriguing question vis-a-vis native-born and foreign-born youths of Mexican descent. Using data from the National Education Longitudinal Study, from 1988 to 1992, I estimate the effects of working during the tenth grade on the likelihood of graduating from high school two years later. Hours worked per week had a negative effect on the odds of graduating for both U.S.-born youths of Mexican ancestry and non-Hispanic Whites, but had precisely the opposite effect for foreign-born Mexican youths.

Introduction

Since the mid-1980s, social scientists have addressed the concern that the economy's need for part-time, low-skilled, minimum wage labor might spur adolescents into employment prematurely, thereby undermining their emotional well-being as well as their investment in education (Carr, Wright, and Body 1996; D'Amico 1984; Green 1990; Marsh 1991; Steel 1991; Steinberg, Fegley, and Dornbusch 1993). Recently, the National Research Council (1998) summarized the current literature on this topic and reported that 44% of 16- and 17- year-olds hold jobs and two out of every five 7th and 8th graders work during their school years. In addition, the council called attention to the potential risks associated with youth employment, reminding us that the benefits parents and policy makers so often attribute to adolescent employment (Phillips and Sandstrom 1990; Steel 1991) may in fact be erroneous. Given that education is a key factor determining future social and economic success, it remains especially important that we understand the effects of working while in school on educational attainment. If early work experience enhances educational outcomes, then maybe adults should encourage teenagers to pursue employment. If, on the other hand, managing a job in addition to school work reduces academic performance, then perhaps parents and policymakers should take measures to discourage youth employment.

Despite the considerable interest among observers regarding the effects of adolescent employment, few researchers have paid attention to how this issue relates to Latino youths. The paucity of such information is interesting given that Latino youths appear to enter the labor force relatively early compared to non-Latinos (Barton, Farkas, Kushner, and McCreary 1985; Johnson Herring 1989; Olatunji 2000). This study examines this salient topic vis-a-vis Mexican-origin youths for several reasons.

To begin, persons of Mexican descent comprise the majority (63.3%) of the U.S. Hispanic population and exhibit not only the lowest level of education among the three major Latino subgroups (Mexicans, Puerto Ricans, and Cubans), but also perhaps the lowest of any ethnic group in the nation as a whole (U.S. Bureau of the Census 1998, p. 167). In 1997 only 54.7% percent of all Hispanics and 48.6% of Mexican-origin persons over the age of 25 had completed at least four years of high school, compared to the national average of 82.1% (U.S. Bureau of the Census 1998). Such disparity is cause for concern because those who do not finish high school "experience higher levels of unemployment, receive lower earnings...are more likely to have health problems, engage in criminal activities, and become dependent on welfare..." (Rumberger, 1995, p. 584). Thus, if education is the gateway to employment opportunity, then a high school diploma is the sine qua non of upward social mobility. Might adolescent work experience be an unrecognized culprit encouraging Mexican-origin youths to drop out of school?

Further, the literature on mental health suggests that Mexicans who come to the U.S. in search of employment may suffer a tradeoff in terms of psychological well-being in exchange for the jobs and wages they procure (Guarnaccia 1997). If this is so, then Mexican adolescents who work may be especially at-risk of psychopathology, which in turn may undermine educational achievement. For example, some researchers link early work experience among the general population to poor performance in school, depression, delinquency, and drug use (Bachman and Schulenberg 1993; Mortimer et al. 1992; Shanahan et al. 1991; Steinberg and Dornbusch 1991).

Lastly, although Hispanics are not the fastest growing minority group in America as is commonly touted,[1] based on current demographic trends, it appears certain that they will surpass African Americans to become the largest ethnic minority group in the United States by the year 2005 (U.S. Bureau of the Census 1998). And if the projections stay on course, 1 in every 5 persons living in the United States could be Hispanic by the middle of the 21st century (National Association of Hispanic

---

1. According to data from the U.S. Bureau of the Census 1998, the U.S. Hispanic population grew by 30% from 22.1 million to 28.8 million between 1990 and 1997. Over the same period, the smaller Asian and Pacific Islander population grew more rapidly by about 35% from 7.5 million to almost 9.9 million. In comparison, the African American population grew by 11% to 33.7 million and non-Hispanic Whites rose by only 6% reaching 220.6 million during the same time span.

Publications 1995). Consequently, the extent to which early work experience constitutes a benefit or detriment to the well-being of youths in this rapidly expanding segment of the population could have broader social and economic repercussions.

Does early work experience undermine or promote the likelihood of finishing high school among Mexican-origin youths? To extend the existing knowledge base on this question, this investigation draws data from the National Education Longitudinal Study, from 1988 to 1992. First, I estimate the effects of working during the eighth grade on the odds of dropping out of high school by tenth grade among youths of Mexican descent, compared to non-Hispanic Whites. Then, I estimate the effects of work experience in the tenth grade on the likelihood of graduating from high school two years later.

Theoretical Framework and Hypotheses

Researchers have studied the question of whether early work experience promotes or stymies adolescent well-being principally from the standpoint of two theoretical orientations (Bachman and Schulenberg, 1993; Greenberger and Steinberg 1986; Marsh 1991; Steinberg et al., 1993). Developmental models view adolescent employment positively, as an opportunity for young people to learn not only the skills but also the attitudes and habits necessary to participate successfully in the workplace. This perspective contends that young people will transfer the benefits they derive from work to other areas of their lives, including school. In this manner, work aids their

maturation into responsible adults. Most youth-to-work policy initiatives rest upon the developmental orientation (Steel, 1991). Alternatively, zero-sum models view the issue of youth employment in terms of priorities, whereby other activities take precedence over academic interests. Accordingly, time invested in employment subtracts from time that could be devoted to school activities (Marsh 1991). Therefore, one can expect the quantity of hours worked weekly (work intensity) to be inversely related to educational attainment. In articulating a zero-sum perspective, D'Amico (1984) suggested that the rise in high school employment in part accounts for the decline in educational performance among U.S. students. Note, however, that this perspective seems to rest upon the rather questionable assumption that time teenagers invest in employment would actually be spent on school-related activities in the absence of having a job.

Both developmental and zero-sum orientations, however, presume that schooling is the normative experience for adolescents. In other words, these models flow from the premise that schooling is congruent with the social and emotional development of the average American youth. Historically speaking, such congruence between adolescence and schooling is a relatively recent phenomenon that reflects the advanced standard of living within our wealthy, post-industrial society. If this is so, then neither perspective would seem to provide an appropriate framework upon which to base predictions about the effects of work experience among Mexican-origin youths. Why not?

An examination of the role that work plays in Mexican culture suggests that

holding a job may bear a substantially different meaning and consequences for youths of Mexican descent, compared to the average American adolescent. It is generally well known that in Mexico, secondary education is not the predominant youth experience as is the case in the U.S. Instead, adolescents typically seek employment after completing a primary level of schooling. Hence, for Mexican youths, it seems that work–not school–is the normative adolescent experience.

One may argue, however, that by virtue of sheer numbers alone, work experience appears to be the rule rather than the exception for most adolescents in general, as studies demonstrate that the majority of teenagers in the United States work at one point or another prior to adulthood. But in relation to the two theoretical perspectives that scholars rely on for predicting the effects of youth employment, schooling *supercedes* work as the primary responsibility of adolescents. For example, in discussing the school-work dilemma, Shanahan et al. assert: "Clearly, school, not work, is widely considered to be the central 'business' of the adolescent's life" (1991, 300). Greenberger and Steinberg (1986) echo the same sentiment in explaining that recent changes in the American social and economic context in fact render the workplace deleterious to adolescent development. These suppositions stem from the American social context, so it is doubtful that they apply equally to youths of Mexican-origin.

Early work experience may produce distinct outcomes for Mexican-origin youths, for whom employment may mean something substantially different from what it

does in U.S. society at-large. How then might work and its consequences differ for these youths? Traditional cultural values, still intact in many Latino families, dictate that both male and female children share the responsibilities for maintaining the family (Carraquillo, 1991; Suarez-Orozco, 1985; Zambrana, 1995). Therefore, taking on employment at an early age fulfills this cultural expectation of mutual support among family members. Consequently, it is common that many youths accompany their parents to the United States specifically for the purpose of finding work to improve the standard of living for themselves and their families (Massey, 1987). In addition, there is evidence that family formation takes place earlier among Hispanics than among non-Hispanics (see Barton et al., 1985), making employment all the more necessary. Thus, through employment youths of Mexican descent may derive a special sense of accomplishment in fulfilling their familial responsibility. In contrast, non-Hispanic youths, according to Greenberger and Steinberg (1986), view jobs merely as a means of acquiring the money needed to pursue personal and leisure ends. Hence, in exploring the effects of youth employment among Mexican-origin adolescents, this study also enables us to stretch farther our theoretical understanding about how early work influences educational attainment by examining the research question from another cultural perspective.

Prior research, of course, provides a starting point for informing our understanding of this topic. Briefly, researchers have found that early employment may

negatively impact performance in and out of the classroom, thwarting rather than developing positive attitudes and behaviors among adolescents (Pallas, 1993; Shanahan et al.1991; Steinberg & Dornbusch, 1991). Interestingly, high levels of work intensity measured in terms of hours worked per week appears to be inversely related to educational outcomes while moderate levels (less than 15 to 20 hours per week) seem to enhance them (Marsh, 1991; Mortimer et al. 1991; Stern et al. 1990). However, Bachman & Schulenberg (1993) caution that a selection factor may confound the relationship between intensity and attainment, whereby youths who perform poorly in school opt to work longer hours as an alternative route for success.

In a recent study focused on at-risk youths, Chaplin & Hannaway (1999) underscore both positive and negative employment consequences, reporting high school employment to be associated with higher dropout rates, but also with higher earnings in later years. Further, they assert that at-risk status accounts for differences in the effects of early work experience. Similarly, McNeal (1997) found positive and negative effects on dropping out of high school to be contingent upon work intensity as well as employment type.

Of particular interest to this study, Steel (1991) observes that ethnicity makes a difference in how the advantages as well as disadvantages of employment are dispensed: "Hispanic and Black youths, who encounter barriers to socioeconomic attainment in general, do not appear to benefit from early work experience to the same extent or in the

same way as Whites—and may in fact suffer in terms of subsequent enrollment" (p. 444). Specifically, among youths aged 17 to 18 in 1979, employment status and the number of hours worked weekly both were positively associated with subsequent enrollment in school for Whites but not for Hispanics. Consistent with Steel's observation, Carr et al.(1996) report that adolescents holding jobs during high school tend to be White males from intact, middle-income families whose parents are well-educated. It seems that the opportunity to work is yet another benefit of advantaged youths as opposed to those who are most in need financially.

Hypotheses

Our questions, then, are these: What are the consequences of early work experience for Mexican-origin youths? Do they differ from those of their Anglo-American counterparts? And what about within group differences, that is, are the effects of early employment the same for U.S.-born Mexican Americans and their foreign-born counterparts? If the meaning of work differs for youths based on cultural orientation, then the effects observed in the literature pertaining to the consequences of work experience among adolescents in general, may be distinct for Mexican-origin youths, especially immigrants. As a central hypothesis of this investigation, therefore, I propose that work experience will have a positive effect on graduating from high school among youths of Mexican descent, compared to Anglos, net of all else. And as a corollary, I expect that among Mexican-origin youths the effect of work experience on

graduating from high school will be positive for immigrants, compared to the U.S.-born, net of all else.

Data and Methodology

To examine the consequences of youth employment on high school completion, I extract data from the National Education Longitudinal Study of 1988 (NELS). Sponsored by the National Center of Education Statistics for the U.S. Department of Education, this database provides extensive information on the social and educational conditions of a nationally representative sample of 24,599 eighth-grade students in the United States during the spring of 1988. Participants were identified during the base year using a two-stage sampling procedure that randomly selected 1,000 schools and then selected clusters of 24-26 students per school. The original NELS cohort was subsampled during subsequent surveys (1990 and 1992). As a result, approximately 77% of the original cohort remained in the database by 1992, the end year for this analysis. The design also consists of over-samples of Hispanics, and a special effort has been made to retain these and other policy sensitive populations in follow-up surveys. Consequently, NELS is an excellent source of data for this study.

Sample

To analyze the effects of work experience on the aforementioned outcomes, I analyze data from 1988, 1990, and 1992, the year in which most of these youths should have finished high school. I began by selecting cases coded as "Mexican/Chicano" or

"Non-Hispanic White" in preparation for comparisons on outcomes between Mexican-origin and Anglo youths. Doing so yielded an initial pool of 1,952 (10.7%) Mexican ethnics and 16,317 (89.3%) Whites. Next, I selected only those respondents that participated in all of the first three waves, either as students enrolled in school or as dropouts. This step was necessary because many respondents entered the survey initially in 1990 or 1992 in order to make the sample representative of tenth and twelfth graders in those respective years.

As a rule, I drop cases with missing information on any of the dependent variables, except in the case of variables used to create composite measures (e.g., self-esteem and delinquency), or when values can be assigned with reasonable assurance of accuracy, based on other information contained in the database. In the former instance, I typically generate a composite score by substituting the mean of the legitimate values for cases missing a minority of the total number of items that comprise the composite measure. With independent and control variables, I use regression to predict values for cases missing data on "important" measures with relatively high rates of non-response (e.g., family income, parents' education levels, family poverty status, etc.), but use mean and mode substitution (depending on the level of variable measurement) for other variables. In addition, I simply may drop cases for variables with relatively little missing data. The result was a sample of 10,924 respondents, 90.6% (9,895) of which were White and 9.4% (1,029) were of Mexican-origin.

One other important consideration with respect to methodology that must be addressed pertains to survey design effects. The design effect is the ratio of the standard error of an estimate calculated by taking into account the survey design compared to that for the estimate based on a simple random sample. A multi-stage sample design produces statistics that are more variable than they would have been if the design had been a simple random sample of the same size. Respondents drawn in clusters tend to be similar compared to independently selected ones; therefore, clustering increases the variability of sample estimates. Consequently, the standard errors used in calculating statistical significance of regression coefficients should be adjusted to account for this variability. However, preliminary analyses indicated that such adjustments yield rather conservative coefficients. Therefore, in order to use findings reported in a similar study by Carr et al. (1996) as a point of comparison, I weight the data in this study as they did, by the dividing the sampling weights for a given year by the average weight for the sample.

Table1 displays the weighted characteristics of the NELS sample. Mexican-origin youths comprise 8.5% of the respondents. They differ from non-Hispanic Whites on several variables, as expected. Roughly 17% of Mexican-origin eighth graders in 1988 were born outside of the United States, compared to only 1% for White eighth grade students. Naturally, relatively few of the Mexican youths came from homes where only English was spoken (15% versus 93% for Whites). Average annual family

income for Whites was almost twice that for Mexicans, and notable disparities also appear on parental education and urban residence. On the other hand, the two groups seem comparable in terms of age and family composition, but females comprise a slightly larger share of the Mexican-origin group (52.7% versus 49.8%).

[Table 1 About Here]

Dependent Variables

I measure high school completion using the NELS variable that reported a transcript-indicated outcome for school during the 1992 survey. I recoded the original categorical variable into a new one, GRADUATE, where 1 = graduated, and 0 = not graduated. Cases coded (1) on the new variable include all respondents who graduated from high school by June 30th, 1992. According to my calculations, 63.2% of the Mexican-origin sample members graduated in 1992, compared to 81.2% of their Anglo counterparts (statistics are weighted). I measure dropout status in 1990 using the variable that reported the enrollment status of respondents for the spring semester of the same year. In the same fashion as above, I recoded the original categorical variable into a new and dichotomous one where 1 = dropped out in spring 1990, and 0 = did not drop out. Doing so resulted in a dropout rate of 5.8% for Anglos compared to about double that figure (12%) for Mexican-origin adolescents.

Independent Variables

I operationalize the concept of work experience using two variables: hours

worked per week and work status. First, I transformed the ordinal level variables for 1988 and 1990 into ratio ones by computing interval midpoints. The original variables measured work intensity based on self-reports of how many hours a respondent worked for pay per week on the current or most recent job as of the interview. For the base year, the new variable acquired the following values: 0 = No hours (representing those who reported not working), 2.5, 7.5, 15.5, and 21 hours. As adolescents tend to work more as they get older, the values for the new 1990 variable were: 0, 5, 15.5, 25.5, 35.5, and 41 hours per week. Similarly, the two original variables indicating the type of work the respondent did in 1988 and 1990 were categorical. I used these to create two new dichotomous variables, WRKD88 and WRKD90, where zero (0) represented those who did not work, and one (1) represented those who worked, combining all job categories.

Control Variables

Other factors must be controlled statistically that otherwise may produce spurious effects between the independent and dependent variables. At the same time, one must consider the potential threat of collinearity in selecting such variables. Consequently, I select a parsimonious set of variables known to be associated with high school completion and whose variance inflation factors, as indicated by an F-test, revealed no evidence of multicollinearity (see Fox 1991; McClendon 1994).

Further, with concern for the threat of selection effects, I select two important measures. Since both outcome criteria specifically assess high school completion, I

controlled for personal educational expectations (1=Won't finish H.S., 2=Will finish H.S., 3=Vocational after H.S., 4=Will attend college, 5=Will finish college, 6=Higher school after college). In addition, I applied what appeared to be a robust indicator of those youths who were at-risk of dropping out of school, thereby testing Chaplin and Hannaway's (1999) contention that at-risk status explains ethnic differences in work effects. Specifically, the measure indexes six factors associated with dropping out of school: single parent family, low parent education, sibling dropout, three or more hours at home alone, limited English proficiency, and low family income. Including these variables enable me to examine the effects of work experience, net of respondents' educational intentions and probability of dropping out, thus strengthening the ability to establish a causal link between the criteria and predictors.

Following these guidelines, then, I control for several individual and background characteristics including: race/ethnicity, nativity, sex, age, SES (a composite, interval measure of parents' education, occupations, and incomes), at-risk status, and educational expectations.

Methodology

Given that both dependent variables are dichotomous, logistic regression is the preferred statistical technique of analysis (Menard 1995). I interpret the effects of predictors in terms of their more intuitive values, that is, as odds, rather than log odds. In order to estimate the effects of work experience on the odds of dropping out of high

school by 1990 and graduating from high school by 1992. I compared regression results of U.S.-born and foreign-born Mexican-origin youths to those of non-Hispanic Whites, and then contrasted the outcomes between the two Mexican-origin groups alone. Since we might logically expect a significant cultural contrast between Mexican-origin and Anglos adolescents, these comparisons test the research hypothesis that cultural orientation mediates the effects of employment in favor of youths of Mexican descent, especially the foreign-born. In both comparisons, the first model tested for differences between nominal groups; the second model tested for a direct effect of work experience; model 3 tested for interaction effects; and model 4 controls for personal and background factors.

Findings

Does early work experience increase or decrease the odds of graduating from high school on time among Mexican-origin adolescents? Does working produce similar or different outcomes for Mexican-origin youths compared to Anglos? Are there within group variations in the effects of employment among youths of Mexican descent? Using these data I found that work intensity but not work or employment status had a significant effect on educational attainment, which I summarize below.

The first model in Table A indicates that, in general, Mexican-origin youths are much more likely than Anglos to dropout of school, as one might suspect. Model 2 demonstrates that the number of hours worked per week in 1988 had a positive and

significant effect on dropping out among the whole sample. Importantly, the third model with interaction terms illustrates that this effect did not vary by ethnicity. Consequently, I dropped these terms in the final model and witnessed that the effect of work intensity in 1988 on dropping out of school two years later, was positive and significant, net of other factors ($p \leq .05$). Notably, however, the influence of work intensity was actually quite small, raising the odds of being a dropout by less than 2 percent ($e^b = 1.02$). (Moreover, I tested for a non-linear relationship and witnessed a similar outcome. Only in this part of the entire analyses did I find any evidence of non-linearity, and since the size of the effect appeared trivial, I have chosen not to display it.) In contrast, age proved to be the greatest culprit contributing to dropout status. Specifically, for each additional year increase in age, an eighth grade student in 1988 raised their chances of leaving school in 1990 by nearly four times, even after controlling for such pivotal predictors as ethnicity, SES, gender, and at-risk factors. In fact, when holding these variables constant, the odds for U.S.-born Mexican-origin youths actually dropped by 33 percent, compared to their Anglo counterparts.

[Table 2 About Here]

Turning to the next step of the analyses in that included only adolescents of Mexican-origin, the evidence suggests that work experience in the eighth grade played a far more significant role in dropping out of school within two years than it did among Anglo adolescents. To begin, Model 1 in Table 3 demonstrates that foreign-born status

doubled the odds of dropping out in 1990 (e^b = 2.08). The second model shows hours worked per week again had a positive but relatively weak impact on average (b = .03). This time, however, the interaction term in Model 3 generated considerable variation in the effects of early work experience on dropping out of high school. The observed variation held even after applying the rigorous controls in Model 4. Compared to U.S.-born youths who did not work, for foreign-born youths who did, the odds of dropping out by 1990 fell by 9percent for each hour worked per week, (e^b = .91). Also, in comparison to the reference category, among immigrant youths the effect of zero hours of work per week on the odds of dropping out was twice as high (e^b = 2.22), while for U.S.-born youths who worked, the odds of dropping out rose by 4 percent for each hour worked per week (e^b = 1.04). All of these effects were observed at less than the .05 level of confidence. In sum, the evidence seems to suggest that the effect of early work experience on dropping out of high school is a function of nativity. Specifically, it appears that work intensity *reduces* the probability of dropping out of high school among foreign-born Mexican-origin youths, but *increases* the probability among the U.S.-born. To see whether the effects of work experience observed here on dropping out of school are consistent with those on odds of graduating, let us turn to the final analyses.

[Table 3 About Here]

Examining the effects of work experience in 1990 on the odds of graduating in

1992, we do in fact witness a pattern similar to the corresponding model in the previous set of analyses. Consistent with the effects on dropping out of school two years prior, Model 1 and 2 in Table 4 demonstrate that work intensity in the sophomore year had a significant and negative effect on graduating two years later in 1992. However, the subsequent models (3 & 4) indicate that the effects of hours worked per week varied this time based on nativity and ethnicity. In support of the research hypothesis, we observe that, the effect of work intensity on graduation was *significant and positive* ($p \leq .01$) for foreign-born youths of Mexican descent, compared to non-working Anglo youths. Net of all else, each additional hour worked per week in 1990 increased the odds of graduating in 1992 by 7 percent, among immigrant Mexican youths compared to non-Hispanic Whites who did not work. Further, among working Anglo youths, work intensity had a *significant and negative* effect ($p \leq .0001$). Specifically, net of other factors, the odds of graduating in 1992 decreased by 2 percent for each additional hour that these adolescents worked, compared to their non-working counterparts. As for U.S.-born youths of Mexican descent, the effects of work experience were not other than zero, compared to the reference category.

[Table 4 About Here]

Finally, we examine the last set of models testing the effects of work intensity on graduation among Mexican-origin youths only. Whereas the first two models in the analysis on dropping out of school favored the U.S.-born, the corresponding models in

Table 5 exhibit no difference between the U.S.-born and the foreign-born, in terms of the odds of graduating in 1992. Once again, however, the findings in the subsequent two models are consistent with what we observed with respect the effects of work intensity on dropping out of school. Specifically, Model 4 demonstrates that, net of all else, each additional hour that foreign-born youths worked per week in 1990 *increased* the odds of graduating in 1992 by 6 percent, compared to non-working U.S.-born youths. In contrast, the same measure of work intensity among U.S.-born youths of Mexican descent actually *decreased* their odds of graduating by 2 per cent.

[Table 5 About Here]

Thus, in response to the research question, these data provide evidence that among youths of Mexican-origin the effects of early work experience on high school completion are largely contingent upon native status. In general, among the foreign-born it seems that work intensity decreases the likelihood of dropping out of high school and increases the chances of graduating from high school on time. On the other hand, the effect appears to be precisely the opposite for U.S.-born youths of Mexican descent. Moreover, among non-Hispanic White adolescents, early work experience also appears to do more harm than good, as far as high school completion is concerned. These findings therefore underscore the argument that considerable diversity exists among Mexican ethnics in particular as well as among Hispanics in general. As for an explanation of the effects of that diversity, the author addresses that topic in the

following and concluding section of this paper.

Conclusion

In light of the pressing concern among researchers and policymakers regarding the effects of teenage employment, the author has called attention to this issue vis-a-vis the Mexican-origin population in the United States. Given their increasing numbers, their propensity for early labor force participation as a specific motive for coming to the U.S., and their relatively low rate of high school completion, the examination of the research question among the Mexican-origin segment of the population is a particularly important one. Specifically, this study sheds light on the question of whether early work experience supports or undermines high school completion.

The analyses demonstrated that work intensity, measured as worked per week, had a positive effect on the odds of dropping out of school by the tenth grade and a negative effect on the odds of graduating from high school by the twelfth grade–for both U.S.-born youths of Mexican ancestry as well as non-Hispanic Whites. However, in support of the research hypothesis that early work experience promotes high school graduation among Mexican-origin youths, the data exhibited consistent evidence that foreign-born adolescents tend to benefit from employment. In fact, for these youngsters, even after controlling for such important factors as individual educational aspirations, SES, and other variables known to be associated with dropping out of high school, work intensity actually improved the chances of staying in high school and earning a diploma,

especially compared to U.S.-born youths of Mexican descent. Furthermore, we observed a negative effect on high school completion among U.S.-born Mexican-origin youths who worked, compared to their U.S.-born counterparts who did have a job. This outcome seems counterintuitive given that, on average, immigrant youths possess more deficits, in terms of cultural adjustment and language skills, than do other youths. Yet, early work experience clearly seems to confer benefits upon Mexican immigrant youths that do not apply to other adolescents in the United States. But why?

Researchers have attempted to answer this question in the general population relying on either a zero-sum perspective that views work in competition with schooling for young people's time, or a developmental framework that, based on the positive effects observed in some studies, suggests many adolescents improve their maturation process–and thus schooling–by assuming the challenges and consequences concomitant with employment. As far as foreign-born youths of Mexican descent are concerned, however, the results observed here do not appear to support either of these theoretical orientations very well. In the case of the zero-sum model, work intensity was associated with an increased likelihood of staying in high school and graduating on time–precisely the opposite effect observed among U.S.-born youths of Mexican-origin and non-Hispanic Whites. As for the developmental model, the fact that among the three groups observed in the study immigrants alone demonstrated benefits from work leads one to suspect that this model inadequately explains the outcomes as well. For if this model

were operative, should we not expect similar results across the three groups?

Perhaps most enigmatic is that the outcomes were more similar among Anglo-American youths and U.S.-born Mexican-origin ones as opposed to similarity among the latter group and their foreign-born counterparts from Mexico. The author contends that the such results provide evidence in support of what appears to be, not only a protective effect but a promotional one, associated with immigrant status. On the one hand, an attachment to their native culture may serve as insulation against the negative stereotypes that U.S. society holds of Mexican-origin adolescents. On the other hand, that same culture may also instill a more purposeful meaning and value for work than what one typically finds among other adolescents in the U.S.

The findings reported here also are congruent with a body of literature, cited earlier in the paper, that argues immigrants often out-perform their U.S.-born ethnic counterparts, possibly as a result of the drive and determination to succeed in the new land, which typifies many voluntary immigrants. In the case of Mexican immigrants and early work experience, perhaps the purposeful aim of securing employment compensates for their relatively low levels of human capital. For them perhaps the determination to fulfill their traditional responsibility to their families by acquiring the superior earnings afforded by the U.S. labor market, helps spur them on and beyond the obstacles they face in a foreign country.

A primary message embedded in this research to those intent on rendering

services aimed at overcoming the obstacles to a higher quality of life for the Mexican-origin segment of the population in the United States, is to remain mindful of the cultural diversity that may exist within the group. In addition, careful consideration must be given to crafting policies and programs designed to facilitate teenage employment among at-risk students in general and those of Mexican-origin in particular. Based on the evidence seen here, it appears that an adolescent's attitude toward work, rather than work itself, may be the pivotal factor determining the effects of employment, at least as far as high school completion is concerned.

Obviously, as this study has revealed, intervention strategies must also give careful consideration to the differences among Mexican-origin youths. In fact, the findings in this study seem to imply that, in some ways, the U.S.-born segment of the Mexican-origin community may be more in need of assistance than the foreign-born one. Thus, special attention should focus on the effects of assimilation that I have only touched upon here. Accordingly, future studies may find that inter-generational factors enrich the explanatory power of theories on the effects of early employment among youths of Mexican descent. To the same token, gender constitutes yet another factor deserving more specific attention in future research, given that the different roles of the sexes in the context of distinct cultures would almost naturally compound the effects of early work experience on adolescent well-being. Taking such issues of diversity into account may increase the likelihood of designing work experiences and other

interventions that aid Mexican-origin youths in completing secondary education.

References

Bachman, Jerald G. and John Schulenberg. 1993. "How Part-Time Work Intensity Relates to Drug Use, Problem Behavior, Time Use, and Satisfaction Among High School Seniors: Are These Consequences or Merely Correlates?" Developmental Psychology 29:220-35.

Barton, Margaret, George Farkas, Kathy Kushner, and Laureen McCreary. 1985. "White, Black, and Hispanic Male Youths in Central City Labor Markets." Social Science Research 14:266-86.

Carr, Rhoda, James D. Wright, and Charles J. Brody. 1996. "Effects of High School Work Experience a Decade Later: Evidence from the National Longitudinal Study." Sociology of Education 69:66-81.

Carraquillo, Angela L. 1991. Hispanic Children and Youth in the United States: A Resource Guide. New York: Garland Publishing.

Chaplin, Duncan and Jane Hannaway. 1999. "High School Employment: Meaningful Connections for At-Risk Youth." Washington, D.C.: The Urban Institute.

D'Amico, Ronald. 1984. "Does Employment During High School Impair Academic Progress?" Sociology of Education 57:152-64.

Driscoll, Anne K. 1999. "Risk of High School Dropout Among Immigrant and Native Hispanic Youth." *International Migration Review* 33: 857-75.

Fox, John. 1991. Regression Diagnostics. Newbury Park, CA: SAGE Publications.

Green, David L. 1990. "High School Student Employment in Social Context: Adolescents' Perceptions of the Role of Part-time Work." Adolescence XXV:425-434.

Greenberger, Ellen and Laurence Steinberg. 1986. When Teenagers Work: The Psychological and Social Costs of Adolescent Employment. New York: Basic Books, Inc.

Guarnaccia, Peter J.1997. "Social Stress and Psychological Distress among Latinos in the United States." Pp. 71-94 in Ethnicity, Immigration, and Psychopathology, edited by Ihsan Al-Issa and Michael Tousignant. New York: Plenum Press.

Johnson, Robert J. and Cedric Herring. 1989. "Labor Market Participation among Young Adults: An Event History Analysis. Youth & Society 21:3-31.

Marsh, Herbert W. 1991. "Employment During High School: Character Building Or A Subversion Of Academic Goals." Sociology of Education 64:172-189.

Massey, Douglas. 1987. Understanding Mexican Migration to the United States. American Journal of Sociology 92:1372-403.

McClendon, McKee J. 1994. Multiple Regression and Causal Analysis. Itasca, IL: F.E.Peacock Publishers.

McNeal, Jr., Ralph B. 1997. "Are Students Being Pulled Out of High School? The Effect of Adolescent Employment on Dropping Out." Sociology of Education 70:206-20.

Menard, Scott. 1995. Applied Logistic Regression Analysis. Newbury Park, CA: SAGE Publications.

Mortimer, Jeylan T., Michael Finch, Michael Shanahan, and Seongryeol Ryu. 1992. "Adolescent Work History and Behavioral Adjustment." Journal of Research on Adolescence 21:59-80.

Mortimer, Jeylan T., Michael Shanahan, and Seongryeol Ryu. 1991. "The Effects of Adolescent Employment on School-related Orientation and Behavior." Paper prepared for the volume, Adolescence in Context: The Interplay of Family, School, Peers, and Work in Adjustment. edited by Rainer K. Silbereisen and Eberhard Todt.

National Association of Hispanic Publications . 1995. Hispanics - Latinos: Diverse People in a Multicultural Society. A Special Report. Washington, D.C.: Author.

National Center for Education Statistics. 1992. NELS:88 Second Follow-Up: Student Component Data File User's Manual. Washington, D.C.: U.S. Department of Education.

National Research Council. 1998. "Protecting Youth at Work: Health, Safety, and Development of Working Children and Adolescents in the United States." Washington, D.C.: National Academy Press.

Olatunji, Anane. 2000. "Latino Youths and the Effects of Work Experience on High School Completion." Paper presented at the National Association of Hispanic and Latino Studies Conference, February 21, Houston TX.

Pallas, Aaron M. 1993. "Schooling in the Course of Human Lives: The Social Context of Education and the Transition to Adulthood in Industrial

Society." Review of Educational Research 63:409-47.

Phillips, Sarah and Kent L. Sandstrom. 1990. "Parental Attitudes toward Youth Work." Youth & Society 22:160-183.

Rumberger, Russell W. 1995. "Dropping Out of Middle School: A Multilevel Analysis of Students and Schools." American Educational Research Journal 32:583-625.

Shanahan, Michael J., Michael Finch, Jeylan T. Mortimer, and Seongryeol Ryu. 1991. "Adolescent Work Experience and Depressive Affect." Social Psychology Quarterly 54:299-317.

Steel, Lauri. 1991. "Early Work Experience Among White and Non-white Youths." Youth & Society 22:419-447.

Steinberg, Laurence, Suzanne Fegley, and Sanford M. Dornbusch. 1993. "Negative Impact of Part-Time Work on Adolescent Adjustment: Evidence From a Longitudinal Study." Developmental Psychology 29:171-80.

Steinberg, Laurence and Sanford M. Dornbusch. 1991. "Negative Correlates of Part-Time Employment During Adolescence: Replication and Elaboration." Developmental Psychology 27:304-313.

Suarez-Orozco, Carola and Marcelo. 1985. Transformations: Immigration, Family Life, and Achievement Motivation among Latino Adolescents. Stanford, CA: Stanford University Press.

Warren, John R. 1996. "Educational Inequality among White and Mexican-origin Adolescents in the American Southwest, 1990." Sociology of Education 69:142-58.

Wojtkiewicz, Roger A. and Katharine M. Donato. 1995. "Hispanic Educational Attainment: The Effects of Family Background and Nativity." Social Forces 74:559-574.

Zambrana, Ruth E. (ed.) 1995. Understanding Latino Families: Scholarship, Policy, and Practice. Thousand Oaks, CA: SAGE Publications.

Table 1

Weighted Characteristics of A Nationally Representative Sample of 8th Graders Who Participated in the National Educational Longitudinal Survey,1988

N=10,924

Characteristics	Mexican-origin (n=1,029)	White (n=9,895)
Age in years, 1988 (average)	14.51	14.38
Female (%)	52.7	49.3
Foreign-born (%)	17.1	1.3
Only English language spoken at home (%)	14.9	92.7
Two-parent Family, 1988 (%)	71.4	71.4
Annual Family Income, 1988 (average)	$22,006	$42,849
Did not finish high school %	51.7	14.3
Completed high school but not a 4 yr. College	45.4	65.9
Graduated at least 4 years of college	3.0	19.8
Work Experience		
Respondent ever worked for pay, 1988 (%)	61.3	84.6
# of hours worked weekly for pay, 1988 (avg.)	6.67	6.54
# of hours worked weekly, 1990 (avg.)	19.38	18.38
Weekly amount earned at job, 1990 (avg.)	$4.04	$4.29

Table 2

Unstandardized Logistic Regression Coefficients Predicting The Log Odds of Dropping Out of High School in 1990 among Anglo and Mexican-origin 8th Graders in 1988, National Education Longitudinal Study.
N=10,924

Predictors	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Mexican-origin	b (SE)	b (SE)	b (SE)	b (SE)
USBORN (1,0)	.65(.13)****	.69(.13)****	.59(.18)***	-.40(.16)*
FOREIGN (1,0)	1.38(.21)****	1.41(.21)****	1.75(.27)****	-.01(.26)
Work experience				
HRSWK	--	.03(.01)****	.03(.01)****	.02(.01)*
USBORN X HRSWK	--	--	.02(.02)	--
FOREIGN X HRSWK	--	--	-07(.04)	--
Control Variables				
FEMALE (1,0)	--	--	--	.33(.09)***
AGE	--	--	--	1.37(.07)****
EDEXPECT (1,0)	--	--	--	-.27(.03)****
ATRISK	--	--	--	.33(.05)****
SES	--	--	--	-.76(.09)****
Constant	-2.80(.04)****	-3.01(.06)****	-3.01(.06)****	-22.62(1.05)****
df	2	3	5	8
-2LL	5051.58	5021.91	5017.24	3621.83
Model Chi-square Improvement	51.28****	80.97****	85.63****	1481.04****

_ = non-Hispanic White adolescents are the reference category.
* = $p \leq .05$, *** = $p \leq .001$, **** = $p \leq .0001$

Table 3

Unstandardized Logistic Regression Coefficients Predicting The Log Odds of Dropping Out of High School in 1990 among Mexican-origin 8th Graders in 1988, National Education Longitudinal Study.
N=1,029

Predictors	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Nativity	b (SE)	b (SE)	b (SE)	b (SE)
FOREIGN (1,0)	.73(.22)***	.73(.22)***	1.17(.28)****	.80(.32)*
Work experience				
HRSWK	--	.03(.01)*	.05(.02)**	.04(.02)*
FOREIGN X HRSWK	--	--	-.09(.03)*	-.09(.04)*
Control Variables				
FEMALE (1,0)	--	--	--	.77(.24)**
AGE	--	--	--	.86(.16)****
EDEXPECT (1,0)	--	--	--	-.47(.08)****
ATRISK	--	--	--	.08(.12)
SES	--	--	--	-.89(.26)***
Constant	-2.15(.11)****	-2.32(.14)****	-2.42(.15)****	-14.84(2.30)****
df	1	2	3	8
-2LL	745.43	740.57	734.92	563.65
Model Chi-square Improvement	10.19**	15.05***	20.69****	191.97****

_ = U.S.-born Mexican-origin adolescents are the reference category.
* = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$, **** = $p \leq .0001$

Table 4

Unstandardized Logistic Regression Coefficients Predicting The Log Odds of Graduating from High School in 1992 among Anglo and Mexican-origin 10th Graders in 1990, National Education Longitudinal Study.
N=10,002

Predictors	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Mexican-origin	b (SE)	b (SE)	b (SE)	b (SE)
USBORN (1,0)	-.68(.10)****	-.76(.10)****	-.70(.13)****	-.19(.14)
FOREIGN (1,0)	-.67(.22)**	-.71(.22)**	-1.31(.27)****	-.40(.30)
Work experience				
HRSWK	--	-.02(.00)****	-.02(.00)****	-.02(.00)****
USBORN X HRSWK	--	--	-.01(.01)	.00(.01)
FOREIGN X HRSWK	--	--	.07(.02)**	.07(.02)**
Control Variables				
FEMALE (1,0)	--	--	--	-.07(.06)
AGE	--	--	--	-.45(.05)****
EDEXPECT (1,0)	--	--	--	.38(.02)****
ATRISK	--	--	--	-.38(.03)****
SES	--	--	--	.27(.05)****
Constant	1.67(.03)****	1.94.(04)****	1.95(.04)****	7.01(.74)****
df	2	3	5	10
-2LL	8941.03	8821.90	8810.05	7798.74
Model Chi-square Improvement	50.25****	169.39****	181.23****	1192.54****

_ = U.S.-born Mexican-origin adolescents are the reference category.
* = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$, **** = $p \leq .0001$

Table 5

Unstandardized Logistic Regression Coefficients Predicting The Log Odds of Graduating from High School in 1992 among Mexican-origin 10th Graders in 1990, National Education Longitudinal Study.
N=821

Predictors	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Nativity	b (SE)	b (SE)	b (SE)	b (SE)
FOREIGN (1,0)	.01(.21)	.04(.22)	-.61(.27)*	-.39(.29)
Work experience				
HRSWK	--	-.02(.01)**	-.03(.01)****	-.02(.01)**
FOREIGN X HRSWK	--	--	.07(.02)***	.06(.02)**
Control Variables				
FEMALE (1,0)	--	--	--	-.17(.17)
AGE88	--	--	--	-.46(.13)***
EDEXPECT (1,0)	--	--	--	.37(.06)****
ATRISK88	--	--	--	-.21(.09)*
SES88	--	--	--	-.02(.17)
Constant	.99(.09)****	1.15(.10)****	1.25(.11)****	6.67(1.96)***
df	1	2	3	8
-2LL	960.05	951.19	936.87	862.65
Model Chi-square Improvement	0.05	8.86*	23.18****	97.40****

_ = U.S.-born Mexican-origin adolescents are the reference category.
* = $p \leq .05$, ** = $p \leq .01$, *** = $p \leq .001$, **** = $p \leq .0001$